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9<sup>th</sup> October 2009

Committee Secretary  
Senate Standing Committee on Community Affairs  
PO Box 6100  
Parliament House  
Canberra ACT 2600  
Australia

Dear sir/madam,

### **SENATE INQUIRY INTO HEARING HEALTH**

SHHH Australia Inc. is a voluntary, non-profit educational organisation dedicated to helping Australians with a hearing loss and whose primary method of communication is through speech. It was founded in 1983 in NSW by a hearing impaired person named Mary Sparke who felt strongly that hearing impaired people needed more than lip reading and hearing aids.

SHHH has since grown and expanded, and now gives information and advice to hearing impaired people and their families, while promoting community understanding about hearing loss. SHHH believes that knowledge is essential to becoming a successful consumer. As its name suggests, its aim is to assist each hearing impaired person to make informed decisions about their own best alternatives for their hearing management.

Hearing impairment can lead to increasing isolation and difficulties in family, social and workplace situations. However, this is not inevitable. Hearing impaired people can help themselves and work to educate the community at large about hearing loss and how to manage it better.

SHHH Australia Inc, as a self help organisation for hard of hearing people, seeks:

- To educate hard of hearing people, their families and friends, and the community at large on the nature and complications of hearing loss and ways of coping with it.
- To assist hard of hearing people to integrate into all aspects of society.
- To provide referral services for the assistance of and guidance of hard of

- hearing people.
- To publish and distribute a regular journal and other information materials to assist all those with an interest in hearing loss and to raise public awareness of hearing loss.
  - To encourage and support groups where hard of hearing people, their relatives and friends can come together in fellowship, empathy and concern based on common experience.
  - To represent the interests of hard of hearing people on matters pertaining to hearing and hearing impairment.
  - To encourage scientific research into hearing loss and associated technology.
  - To promote the welfare of hard of hearing people and, where appropriate, co-operate with other organisations.

SHHH is a member of the Deafness Forum of Australia and supports the matters contained in the Deafness Forum submission. We consider that Deafness Forum is doing good work as the peak body for the hearing impaired in Australia.

**A. The extent, causes and costs of hearing impairment in Australia;**

One in seven Australians suffers a degree of hearing loss. The ratio increases to one in three at the age of sixty ... and by the age of eighty almost one in two will have a significant loss. Next to arthritis, hearing loss is the second most commonly reported disability in Australia.

So if you have difficulty hearing you are not alone – it is estimated that between 3 and 4 million Australians share your problem and frustration.

A significant cause of hearing loss in Australia is apathy. Apathy on the part of citizens has been reflected in apathy on the part of employers and government. We have a lack of public appreciation of the damage caused by excessive noise on hearing. Workplaces are often making efforts to remind workers to use hearing protection but are failing to provide the education needed to motivate workers to protect their hearing. Some years ago the National Acoustic Laboratory commenced a longitudinal research study into the effect of excessive noise on the hearing of the Sydney Symphony Orchestra (SSO). The information provided to the SSO and regular hearing tests revealed that the SSO were not suffering hearing loss at the expected rate. Why? Simply because the ongoing testing and involvement of NAL researchers motivated the musicians to take proper care of their hearing. By contrast, observe any building site or noisy entertainment venue. Few if any of the workers are protecting their hearing. There may be a statutory notice on the site gate, but there is no actual testing or education that would motivate workers to protect their hearing.

Recreational hearing damage is now at epidemic levels thanks to almost universal use of the ipod by young people. We don't appreciate it yet, but researchers know that young people are losing their hearing at a rate never before experienced in our society.

The costs are substantial. Perhaps we should simply plan on providing

hearing aids to every Australian on their 50<sup>th</sup> birthday in a few years time and replace them every 5 years thereafter. No doubt, the manufacturers would be willing to offer a significant discount for such a large order. Then add on all the costs of rehabilitation, assistive listening devices, captions, hearing loops, cochlear implants etc for those who will need them.

### **Farm Workers**

One of the least recognised health issues for farm workers is noise injury. The Deafness Forum suggests that as many as two thirds of Australian farmers have a measurable hearing loss. This is significantly worse than the general population. In particular, there is a disparity in rates of tinnitus and hearing loss in the high frequency range. It is not surprising then to note that many daily agricultural tasks put farm workers at considerable risk of noise injury. Common activities such as using a chainsaw, firearm or uncabined tractor over a sustained period can be enough to cause significant hearing damage.

Despite these dangers, there are actions that farmers can take to reduce their risk of noise injury. Adhering to occupational health and safety guidelines, regularly servicing machinery, 'buying quiet', reducing exposure time, installing a noise barrier and using hearing protection are all ways this can be achieved.

A number of hearing conservation programs have also been initiated to raise awareness of the issue and attempt to reduce its impact on farming communities. Both Australian and overseas initiatives have implemented strategies to educate farmers and provide them with practical solutions.

However, these isolated efforts can only be so effective. There is a definite need for major action on this issue. Farm workers are at risk as far as noise induced hearing loss is concerned. The most effective but not necessarily the most practical method of noise reduction is to modify the noise at its source.

If the noise cannot be stopped, the next step is to reduce its impact on people. This can be achieved for example, through moving noise risks such as feed mixers, away from main work areas, partitioning or sound proofing noisy washer units, replacing mufflers or providing hearing protection, preferably in that order.

Hearing protection that is provided must meet with Australian Standards. Approved earmuffs and earplugs should be purchased with a specific noise level in mind. Earmuffs should be comfortable and have an adequate seal round the ear.

The major consideration is to drop the sound level down below 85 dB(A) but not to reduce it to a level at which no sound can be detected. This can present just as greater safety risk due to staff not being able to hear warnings, or possibly being surprised. For example use of a high pressure cleaner, producing 105 dB(A), must only be reduced by 20 dB(A), not down so low as to block out all external noise. This minimises the chance of someone walking

up and surprising the user of a potentially dangerous instrument.

Any hearing conservation program based upon the use of personal hearing protection devices should include some form of information for personnel directly affected, since co-operation is far more forthcoming from employees who know the reason behind the use of ear muffs or plugs.

## **B. The implications of hearing impairment for individuals and the community;**

### **Causes**

Hearing impairment has many causes. You may have an inherited condition. Disease, certain medications, excessive noise or injury may also be a factor. You may suffer a temporary loss of hearing due to an accumulation of wax in the ear canal; this can be removed by your doctor. There may be a condition in the middle ear, due to infection or disease, which prevents sound from reaching the inner ear. This is known as a conductive hearing loss and can usually be treated either medically or surgically.

In older people, the ageing process itself often causes a progressive deterioration in the organ of hearing in the inner ear, the cochlea. This results in a loss of sensitivity to some sounds. Prolonged exposure to high levels of noise, as in some work places, or exposure to sudden loud noise may also cause damage in the cochlea. This is "noise induced hearing loss" or "industrial deafness".

A loss of hearing which is due to deterioration in the inner ear is known as sensorineural loss or "nerve deafness" and, in general, is beyond the scope of medication and surgery. For some people, a cochlear implant may be possible. For most people the answer lies in audiology: the non-medical management of hearing loss.

### **Effects**

We all know the importance of volume – how loud a sound is – in our ability to hear. The part played by frequency – whether a sound is high or low pitched – is less well understood. Hearing loss seldom occurs equally for all frequencies. Generally there will be an uneven pattern – you will hear some frequencies less well than others.

For most of those in the older age group, the higher frequency sounds are the first affected. Many speech sounds – the consonants and those such as "s" and "sh" fall into this high frequency range. If you cannot hear them, some words will not be clear and you will have difficulty making sense of what is said. Although you may "hear" them, you may not be able to tell the difference between the two questions. "Do you sleep well?" and "Do your feet swell?". And "three seats" may sound like "free seats"! We are often accused of hearing when we want to; the reality is, we hear when we can.

Deterioration of your hearing, in most cases, has been slow and over a number of years and you may not have been aware of it. The television

volume has crept gradually up and up. The number of missed or misunderstood words has increased. Because of the embarrassment of giving inappropriate replies, you may well have decided to avoid social situations. It is easy to become withdrawn and, whether you admit it or not, you become isolated and lonely.

Unless you are prepared to make an effort, you may soon find that others will not take that extra time and patience needed to communicate with you.

Hearing care should be regarded as part of overall health care and consumers are encouraged to seek the services of well qualified professionals. In previous generations, deafness was often equated with impaired mental ability or senility. Happily we live in more enlightened times. For some people, however, a loss of hearing may still cause feelings of embarrassment and a wish to hide their loss. Our aim at SHHH is to help overcome these attitudes, and to foster a positive approach to acceptance and good management of hearing loss. Every year, more than 100,000 Australians choose to be fitted with a hearing aid.

### **Hearing aids**

All hearing aids amplify sound and deliver it directly to the ear. But all aids are not the same. Just like spectacles, aids are prescribed for the requirements of each individual wearer - you and your provider together must choose and program an aid to match your particular hearing loss and lifestyle needs.

All aids are battery powered and respond to sounds received through a small inbuilt microphone. Some aids also include a telecoil that allows the aid to pick up sound from an audio induction loop. This can be a great advantage when using the telephone. It also provides options for using a range of assistive listening devices – especially useful when listening to TV. Many public halls, churches and cinemas now have installed induction loop systems to benefit people who are hearing impaired.

With advances in technology, new ranges of hearing aids offering such features as multiple programs, noise reduction, remote controls and directional microphones are now readily available. Consumers should always be guided by a competent professional as to what features will be of benefit to them with their particular hearing loss and needs.

### **Early Identification of Hearing Loss**

For young people it is important to provide the best possible service to ensure that they are not left behind their peers who have normal hearing. The program of early identification of hearing loss in infants has been a wonderful success for those infants and children who have been identified as having hearing loss and fitted at a young age with hearing aids or a cochlear implant. These young people will have a much better chance of a proper education, employment choices, healthy mental state and general quality of life.

### **The Hearing Services program**

The Hearing Services program has been highly successful in enabling young people under 21 and age pensioners to get hearing aids that they could

otherwise not afford. In particular, it means that all older Australians can have hearing, either at their own expense as self-funded retirees or as government funded hearing aid recipients.

The hearing devices available on the 'free list' are all high quality products, and we wonder about the benefits of the 'top-up' regime, where older people are pushed into buying expensive 'top-up' aids that may not provide them with a better hearing outcome. We would rather see more funding diverted into the key areas of hearing access for older people, including education for carers, assistive listening devices and other aspects of hearing rehabilitation. Managing hearing loss is about a range of different strategies, of which the provision of affordable hearing aids is only one.

Older consumers are a vulnerable group and less able to navigate the path through manufacturer's inflated claims and high pressure sales pitches. We would rather see more emphasis on providing a product that gives a good hearing outcome than one which provides the biggest profit margin to the sellers.

One of the mysteries of choosing a hearing aid is deciding which one is best for the consumer. We have previously asked the Office of Hearing Services to provide information about 'top-up' hearing aids and justify the extra expense of these products. However, they were unable to provide this information. Instead, it is left to the service provider to provide such information. As with any profession, hearing aid providers vary from those who are incredibly conscientious and dedicated to those who are set up to maximize their profits by pushing sales of the most expensive hearing aids, regardless of outcome. Whilst we believe that consumers who can afford to spend \$10,000 should have that choice, what we would like is more objective information about what those consumers are actually getting for their money. Also, we would like better consumer protection. Elderly consumers are a vulnerable group who do not find it easy to complain or stand up for their rights, and often don't realise that they could exchange an unsuitable hearing aid or get a refund if it is unsuitable for their purposes. Instead they don't wear the unsuitable product, and tell their friends that hearing aids are no good. Better follow-up and rehabilitation counselling would help in this regard.

### **Speechreading**

Speechreading is an important and underutilised adjunct to other forms of hearing help. Better Hearing Australia has provided excellent speech reading training throughout Australia for many years and deserves more government support for its work.

### **Assistive Listening Devices**

With a correctly prescribed and well-fitted aid you can hope to manage well in most listening situations. But even the best hearing aids have limitations and there are some listening environments which hearing aid wearers find difficult. There will be times when the use of an appropriate assistive listening device to supplement your hearing aid will make life easier for you ... and for those around you!

## **The Benefits of the Telecoil**

- Do you have difficulty adjusting the volume of TV or radio to a level that is comfortable for you ... and for others in the room?
- Have you ever been in some churches or public halls and noticed that other hearing aid wearers seem to manage better than you do?
- Have you ever tried to make a phone call from a public telephone on a noisy street or in an underground station ... and given up!

A hearing aid with a telecoil could solve your problems in these difficult listening situations.

The T stands for telecoil. If the aid is equipped with a telecoil it has the capacity to pick up sound directly from the magnetic field created by feeding sound into a coil or loop of wire – an audio induction loop.

In older type aids the telecoil is activated by moving a small switch from the microphone position (M) to the T position. Hence the use of the name “T-switch”. In more modern multi-program aids the telecoil is one of the programs that can be selected by toggling through the various programs. It is often indicated by a distinctive beep.

In an induction loop system, sound from a microphone, public address system, home TV or radio – or other sound source – is fed through an amplifier and then to a loop of wire placed around the perimeter of a room or public hall. The total area or part only of the room or hall may be looped. Smaller areas, such as a bank teller’s booth or a ticket office can also be looped. An individual loop worn around the neck, or an induction plate worn next to the aid are other alternatives. The small coil in the earpiece of modern telephones also serves the same purpose.

It is important to note that a telecoil only works in association with associated electronic systems - it is of no use, for example, in direct conversation unless an appropriate assisted listening device is also involved.

When switched to the T position, the hearing aid responds only to those sounds coming through the loop. The volume of your aid may need to be increased. The microphone of the aid is not operating, so unwanted and distracting background noise is not picked up. This can often be a distinct advantage. And if the telecoil is used when answering the telephone, the distracting background noise is eliminated.

Most behind-the-ear (BTE) type aids will have this facility. Some in-the-ear (ITE) aids can also have a telecoil – in some cases this may only be accessed by use of a remote control. The telecoil in an ITE is not as powerful as that of a BTE. If you already wear an aid that does not include a telecoil it may be possible to have one added – ask your hearing aid supplier. The tiny in-the-canal (ITC) aids do not have the capacity to include a telecoil because they are too small.

People often buy an aid because they have difficulty in conversation. Buying an aid is seen as solving a one-to-one communication problem.

When that hurdle is behind you, with a new aid, you will begin to think of

communication in the wider world – at the family dinner table, at work, at meetings, and at social gatherings. If you have a telecoil there are many different assistive listening devices that give extra help in these more difficult listening conditions.

If you want to continue to enjoy television or radio; if you use the telephone; if you go to church, the cinema or theatre; or if you attend social gatherings or meetings, you will appreciate the advantages a telecoil offers. Look around you and notice the number of places that display a blue ear sign advising you that an assistive listening system is installed for your use. Frequently this is an audio loop that can only be of benefit if you have a telecoil on your hearing aid or use another device incorporating a telecoil.

It is important to tell your hearing aid provider that you understand the benefits of a telecoil and would like one incorporated in your hearing aid – this is not an additional cost.

The provider may not think it is a necessary addition, but you as the consumer know better and can insist on its inclusion given that you have an appropriate aid.

### **The Impact of Hearing Loss on our Lives**

Ever received the "silent treatment"? The impact of this is often very powerful (which is probably why it is such a popular form of social punishments among children!) The emotional response we experience as a result of such silence is not just because we are being cut off from "information". Rather, it is the result of being cut off from the source of social interaction. Some would argue that it is this feeling of being "cut off" that can be the most frustrating (and often least obvious/visible!) consequence of hearing difficulties.

Access to communication with others is important for our social and emotional wellbeing. However, the importance of communication for these functions is not always recognised when we start to think about the impact of hearing impairment. As communication becomes more difficult, so does the usual maintenance of relationships with friends and family. Sometimes relationships may begin to subtly change before a hearing loss is even seriously suspected. So when we think about the impact of hearing impairment, it's also important to acknowledge the social/emotional impacts.

SHHH believes that the future of hearing health lies in better overall management of hearing. Australia needs to understand how to prevent hearing loss and how to better manage hearing loss of those who have it. Social isolation leads to depression, health problems and additional costs to the community. We must learn to accept hearing loss as a normal part of the ageing process rather than living in a culture of denial. Once we accept the reality of widespread hearing loss we can then look at overall management in an integrated way, rather than the current simplistic view that advocates hearing aids is the complete solution. Aspects of psychology, counselling, telecommunications, media, building design, public transport, employment, education all need modification to accommodate the hearing impaired. Otherwise we will remain second-class citizens.



## **Disability Discrimination**

The Disability Discrimination Act 1992 is a Federal law administered by the Human Rights and Equal Opportunity Commission (HREOC). Sadly, the benefits for hearing impaired Australians has been underwhelming over the past 17 years. We lag substantially behind the US, Canada and Northern Europe in providing access to the hearing impaired. Too many standards have been watered down by powerful industry lobbyists, who consider the hearing impaired to be a drain on profitability, rather than a market opportunity.

The Federal Government has not provided the leadership required in this area and needs to look at the steps taken by overseas governments such as the US and UK in providing proper access to government facilities and services.

Federal and State law make it unlawful to dismiss a person from employment because of their disability. However disability discrimination is widespread in practice including:

- Refusing to provide services to a person because of a hearing impairment
- Employer refusing to provide reasonable adjustment to employee with disability
- Bullying of a person because they are hearing impaired
- Refusal to provide adjustments that could reasonably be provided

Few consumers use the complaints process which requires the following steps:

1. Make a written complaint to the person who discriminated against you. Explain what happened and how you think it can be resolved. Say you expect a reply from them within 14 days.
2. If no satisfactory reply is received within 14 days, make a written complaint to HREOC or the Anti-Discrimination Board. They can provide you with a standard complaint form. Provide as much detail in the form as possible. Keep a copy of your complaint form.
3. A staff member of HREOC or the Anti-Discrimination Board will contact you for more information and provide a copy of your complaint to the person/organisation you complained about.
4. A meeting will be organised between you and the person/organisation complained about called a "Conciliation Conference". You get the chance to discuss what happened, and hopefully an agreement can be reached that will be satisfactory to you.
5. If you are not satisfied with the outcome of the Conciliation Conference, you can take your complaint to court. Complaints made to HREOC go to the Federal Court/Federal Magistrates Court. Complaints made to the Anti-Discrimination Board go to the NSW Anti-Discrimination Board. Typical outcomes from a Conciliation Conference may include:
  - Agreement that you were discriminated against
  - A formal apology
  - Agreement by the person/organisation to change their practices so that

- the discrimination does not happen again
- Monetary compensation is usually only paid in more serious cases of discrimination.

Not surprisingly, there are very few complaints in this area. People with hearing loss are struggling just to maintain their own lives and sadly have a defeatist attitude to discrimination in most cases. We believe that the government should appoint a Disability Discrimination Ombudsman to be accessible to those citizens who have grievances in this area and to advocate for them with powerful bureaucrats and big business.

### **C. The adequacy of access to hearing services, including assessment and support services, and hearing technologies;**

#### **Low Income Australians**

SHHH supports the policy position of Deafness Forum on this issue. It is a national disgrace that many poor people in our country do not have hearing aids because they cannot afford the cost. These people are suffering a low quality of life and their mental health is affected by their inability to communicate with others.

We urge the government to institute a universal scheme to provide good quality free hearing aids to those who cannot afford to buy them commercially and are not eligible for a voucher. The following description of the SHHH hearing aid bank illustrates the need for a universal scheme to help those who cannot afford to purchase aids. We have struggled to provide what assistance we can, but services such as the Hearing Aid Bank only assist a handful of the many people who desperately need a hearing aid or two.

#### **Hearing Aid Bank**

Over the years many visitors have come into our Information Centres for hearing help and told us that they were unable to afford hearing aids. Whilst government programs cater well for the young and the old, there is a serious need for low cost hearing aids for poorer people of working age.

In the 1980s it was apparent to our Information Centre volunteers that there was a need to establish a facility where poorer people who were not eligible for government aids had the opportunity to obtain second hand hearing aids for a nominal cost. There was little doubt that unwanted second hand aids would become available if the need was made known, but there were issues of obtaining costly hearing aid testing equipment, and who would do the testing of client's hearing and the fitting of the aids.

Philip Newall, then senior lecturer in Audiology at Macquarie University (now professor of Linguistics at Macquarie University) offered help by way of proposing up to 20 clients a year could be fitted by Diploma in Audiology postgraduate students, working under supervision of qualified and experienced audiologists, if SHHH Australia Inc provided the hearing aids.

A formal application was then made to Professor Di Yerbury, vice chancellor

of Macquarie University seeking the University's Co-Operation in the project. Professors Yerbury thought the Hearing Aid Bank was an excellent idea and replied, saying:

*"The University is delighted to be participating in the offering of a community service not available elsewhere in NSW and we look forward to further contact with you as the scheme progresses".*

The first hearing aid was fitted under the scheme in November 1988 and the Hearing Aid Bank celebrates 21 years this year.

The operational side of the Hearing Aid Bank includes the following:

- Collecting unwanted second hand aids
- Processing application forms and eligibility (low income earners/health care card holders)
- Dispatching aids from SHHH Australia Inc to Macquarie University
- Testing and determining the characteristics of the hearing aids at Macquarie University
- Testing clients hearing by audiologists
- Fitting the aid and advising it's use and maintenance

To be eligible for a hearing aid through the scheme, a person must hold a health care card or be a low income earner. Applications can be made through either SHHH Information Centres at Turramurra or Canterbury either in person or over the phone. Applicants undertake to pay \$100- towards the cost of the hearing test, the making of an ear mould and the fitting of the hearing aid. The bank can make use of any behind-the-ear hearing aids.

Demand for the hearing bank services far exceeds the availability. A universal scheme to provide hearing aids for poorer Australians is desperately needed.

### **Captioned television**

It is regrettable that captioned television is not universal. The Australian-made product needs more captions. Look at the number of Captioning Awards won by the pay TV stations over the last few years. Lots of well-captioned US shows on pay TV. By contrast the struggle to get the Australian product to carry captions has been seemingly endless. And now we have the problem of captioning quality where every second word is misspelt.

We need to legislate for all digital television technology to provide captions. The current situation is inadequate.

Digital TV broadcasts are made concurrently with standard TV broadcasts in cities and larger urban centres. The standard television broadcasts are due to be phased out by the year 2014, when the only broadcasts will be in digital format. Hearing impaired consumers might want to buy a digital TV now, but they are still quite expensive. It is cheaper to keep a standard TV, which we will be able to continue using it with digital signal, by purchasing a digital set-top box. As well as buying a digital TV consumers may need to get your TV antenna modified to access the digital signal.

Only a few digital TVs or set-top boxes provide access to captions. One way to check is to see if the device says that it is compliant with Australian Standard 4933. Unfortunately the government did not make compliance with the standard mandatory, so there are many inferior products for sale that do not offer captions. Retailers have no idea about what products have captions.

The choice is further complicated by there being 2 types of Digital TV: Standard Definition television (SDTV) has a picture frame of 480 lines on your TV.

Or if you want to spend more you can get High Definition television (HDTV) which has either 720 lines or 1080 lines which improves picture quality. HDTV also can get a different sort of sound signal, called "digital 5.1 surround sound".

As you can see it is very complex choosing digital TV, and there are few options if you want to record and view captioned programs. Legislating for all products to provide captions would be the best solution.

### **Captioned DVDs**

Why is it that all the imported American and European DVDs come with "Subtitles for the Hearing Impaired", but most of the Australian ones don't? The imported ones have captions because the US and European government made it mandatory for these captions to be provided. The cost of including captions in these products is very modest, and the Australian experience demonstrates that the lack of government regulation results in consumers missing out.

It is not too late to pass a law requiring all Australian DVDs to come with captions. The government has long provided financial assistance to the Australian film industry. Why not force them to provide captions so that a significant group of our society can actually watch Australian products instead of always having to choose the captioned American ones.

### **D. The adequacy of current hearing health and research programs, including education and awareness programs**

#### **Need for a National Awareness Campaign**

We support the Deafness Forum proposal for a National Hearing Awareness and Noise Prevention Campaign. The effects of noise on hearing damage and the resultant devastating impact on a person's life are not generally well understood – including by those within the health care professions.

We envisage the proposed campaign going some way toward halting the current and alarming increase in hearing damage in Australia. This would expose the unpleasant realities of hearing loss to all Australians, and, most importantly, bring the debilitating effects of, and widespread discrimination toward hearing loss out into the public arena.

There have been many public health campaigns over the years, drawing

attention to the nature and effects of various health issues, and highlighting ways in which these can be prevented or managed. There have been varying success rates in terms of public compliance. However, they all achieved one thing in particular – and that was to bring to public attention, the conditions themselves, in order to create change. The need for change needs first to be made apparent to all.

### **Hearing Research**

Hearing loss and rehabilitation is increasingly important in Australia as the prevalence of hearing loss rises and interest in rehabilitation grows. We are fortunate in having the National Acoustic Laboratories (NAL) researching a range of important issues and providing information that has assisted in numerous areas of hearing loss and rehabilitation. We urge the government to maintain funding of the National Acoustic Laboratories and to promote the work of NAL.

### **E. Specific issues affecting Indigenous communities.**

The 2004 Libby Harricks Memorial Oration, delivered by Dr Peter Carter, highlighted the lack of progress in raising standards in Aboriginal ear health. Despite long awareness of the problem, little progress has been made in reducing the level of indigenous hearing loss. In 2009, there is a fresh government commitment to raising Aboriginal health standards from one of the worst in the world to the high standards enjoyed by the non-indigenous population. It is important that hearing health be given appropriate priority.

Hearing loss is the invisible epidemic suffered by the indigenous population. Children who have difficulty hearing will have difficulty learning. The programs available to assist non-indigenous children with hearing loss are mostly absent where Aboriginals live. Speech and language development are delayed. Even if Aboriginal children are able to attend pre-school, they won't make much progress if they can't hear what is being taught. Once a child is delayed in learning, that child will probably never catch up. The problem is compounded for those Aboriginal children who speak a traditional language at home, where English may be a second language.

The World Health Organisation considers a rate of severe otitis media over 4% to be a serious problem. The rate in aboriginal children ranges from 4% in Western NSW to over 60% in the Tiwi Islands. The rate in non-indigenous Australian children is less than 1%.

Aboriginal children in Central Australia showed an alarmingly high incidence of ear disease and associated hearing impairment in a 1983 study, particularly when compared with European children. 55% of Aboriginal children 'failed' the school screening hearing test whereas only 15% and 11% of the European children in Darwin and Alice Springs respectively 'failed'. Of the 507 Aboriginal children in Central Australia who 'failed' their school screening and were followed up by the audiometrist from Alice Springs, 18% of children were found to have an average hearing loss in their better ear of 31 to 45dB. Hearing loss continues into adulthood for many Aboriginals. One study found that 15% of indigenous university students had a hearing loss.

The main problem is middle ear infection, or otitis media. This is a common problem for children everywhere, but if it is not treated properly it results in a hole in the eardrum and can eventually cause permanent damage. Pus discharges through the hole in the eardrum and the child can suffer pain and fever.

Standard medical responses include cleaning of infected ears, surgical repair of long-term perforations and the use of antibiotics.

However, these standard responses have proven inadequate for indigenous communities living in poverty. It is now recognised that indigenous hearing health will only improve if there is a whole-of-life improvement in the lot of the indigenous population, particularly the availability of health services, clean water, adequate housing, improved diet, reduced smoking, control of alcohol and drug abuse. Indeed, the strategies to improve the health and wellbeing of people in third world countries are needed right here in Australia.

There are some specific measures that are available, but are difficult to utilise. Hearing aids are effective in children but there are problems in motivating children to wear them and look after them.

Classroom teaching is problematic where children cannot hear. The Aboriginal Teachers Manual lists several factors for identifying children who have difficulties. They:

- May pull or rub their ears
- May not want to say much
- Look blank, especially when it is noisy in the room
- Don't answer when the teacher or other peers call them
- Look around a lot
- Leave school early
- Have trouble learning English and learning to read and write.

Education of Aboriginal students is further complicated by the fact that while Aboriginal cultures have always been oral, the classroom is based on literacy, the written word and standard English. The Aboriginal child entering a classroom is immediately struck with a barrage of written and oral language that is mostly unfamiliar. At the same time, the effects of otitis media aggravate the disadvantage of Aboriginal students. Furthermore, Aboriginal teaching and learning styles differ greatly from the techniques utilised in the European classroom. Researchers have established that Aboriginal students have more difficulty in learning from the teacher-centred mode of instruction which predominates in European classrooms.

Typically, the Aboriginal child who is not identified by hearing screening, as is so often the case, has a disability to deal with in the European classroom that is invisible. In the past, and even at present, classroom teachers who have been quite unaware of the existence of this disability have labelled these Aboriginal children as 'insolent' or 'ignorant'. These children are also disadvantaged by the effects of classroom noise and generally poor classroom acoustics.

Throughout Australia it is common to refer to Aboriginal children as having

'failed' their hearing test when diagnosed by screening as having conductive hearing loss. Use of this terminology amounts to 'blaming the victim'. In view of the already high 'failure rate' of Aboriginal students in mainstream schools, it should be clear that it is quite inappropriate to impose yet another 'failure' on them, especially when hearing screening should aim to enhance their educational opportunities.

The National Acoustic Laboratory developed an effective means of using amplification in classrooms, by providing the teacher with a microphone and providing amplified sound from wall speakers. This makes the teacher's voice louder for the entire class, so that hearing aids are not necessary. However, use of the amplified classroom has not been widespread, due to the cost and some practical difficulties in its implementation.

Most Aboriginal hearing-impaired children are taught by teachers with no special preparation in childhood hearing impairment. There is also a high turnover of staff in remote schools, and some teachers perceive the needs of the hearing-impaired children as extraneous to their duties, even though half of their pupils might be hearing impaired. Teachers of all children require professional development which should include aspects of conductive hearing loss, its effects on children in the classroom, basic audiology, classroom hearing strategies and hearing aid use in the classroom. In addition, teachers need assistance in incorporating auditory training and language listening skills activities into the curriculum.

Although the hearing loss caused by otitis media will eventually improve in many indigenous children, there will be permanent linguistic, social and educational effects. It is essential that the problem of indigenous children suffering from otitis media be given priority in resource allocation if indigenous children are to have the opportunity to realise their social and educational potential

A major challenge for Australian Hearing audiologists is the remoteness of many Aboriginal and Torres Strait Island communities. Australian Hearing introduced protocols for providing services to Aborigines and Torres Strait Islanders based on 3 principles:

- Provide services in a culturally sensitive way that encourages indigenous people to use hearing services in partnership arrangements;
- 'Shape' services to meet the audiological needs caused by the high prevalence of otitis media (middle ear infection);
- Collaborate with indigenous communities in the planning, development and delivery of hearing services with shared responsibilities for outcomes.

National Acoustic Laboratories initiated valuable research into 3 issues of particular importance to indigenous users – an improved bone conductor hearing aid, improved hearing aid fitting procedures to improve accuracy of fitting bone conductor hearing aids, and research into auditory processing disorders, particularly those resulting from otitis media.

**The future**

SHHH thanks the Senate for initiating this inquiry into hearing health. We shall follow your deliberations with interest.

Yours faithfully,  
Richard Brading  
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SHHH AUSTRALIA INC